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Fig. 1.

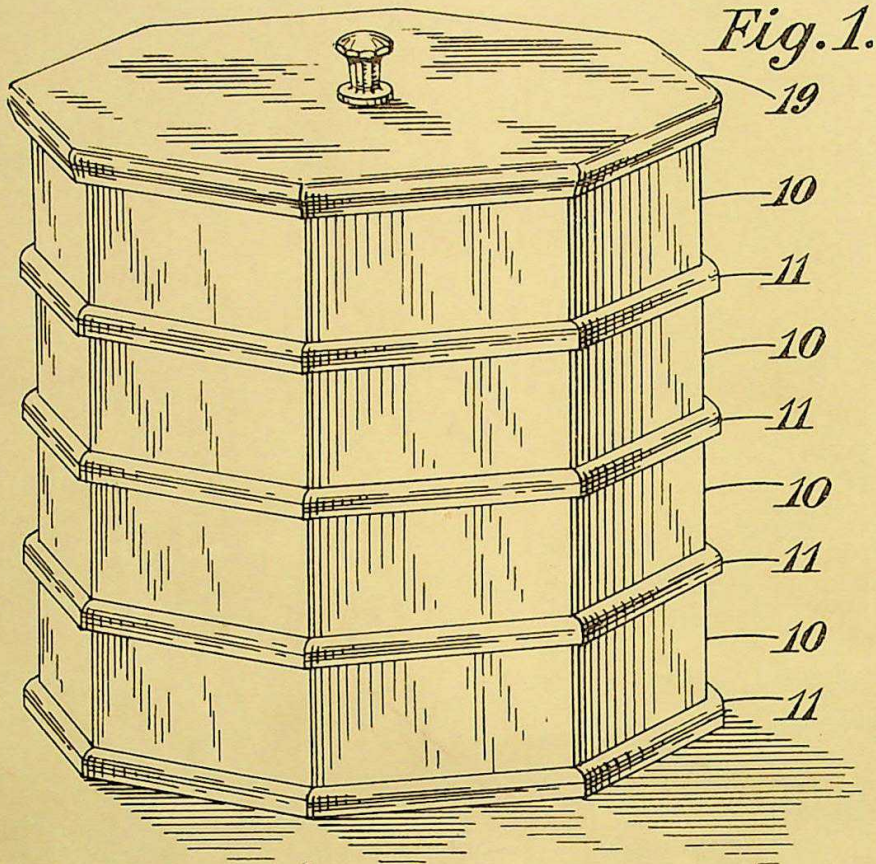



Fig. 2.

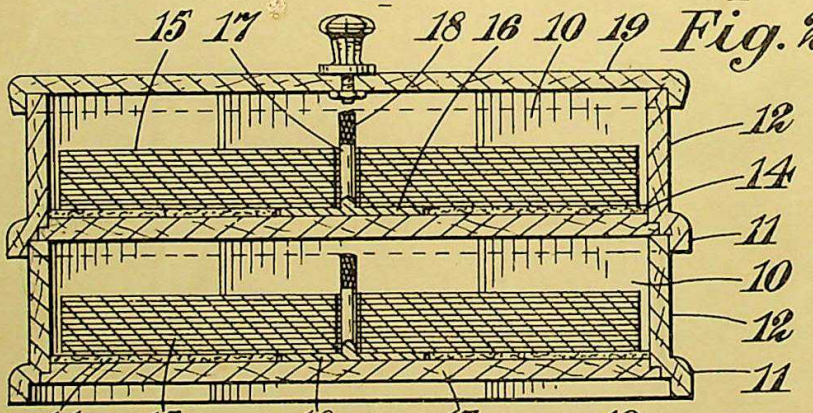
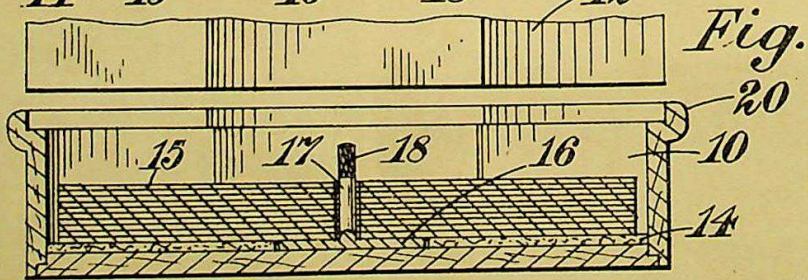



Fig. 3.

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# PATENT SPECIFICATION

Application Date: Oct. 3, 1936. No. 26871/36. 482,667

Complete Specification Left: May 10, 1937.

Complete Specification Accepted: April 4, 1938.

PROVISIONAL SPECIFICATION

## Improvements in Cases for Storage of Gramophone Records

I, CARL ALFRED BENDIX, a British Subject, of 53, Park Lane, London, W.1, do hereby declare the nature of this invention to be as follows:—

This invention is for improvements relating to the storage of gramophone records and has for its object to provide an improved construction and arrangement of casing which is particularly adapted to accommodate groups of records which are normally used together.

It is customary now to contruct gramophones so that they receive a number of records, usually eight, but sometimes twelve in a group, and automatically to effect the changing of the records as the reproduction of each is finished. Hitherto it has been necessary to assemble the various records of a group individually and place each one separately in position in the gramophone mechanism, but since a certain selection of records are normally always used as a group, and never individually, the object of this invention is to facilitate the storage and handling of the records in such groups.

According to this invention there is provided in a gramophone record storage means, the combination with a container, of a carrier device within it which is adapted to receive and locate a number of records in a stack, and to faclitate their removal from the container and their subsequent handling as a unitary stack.

According to another feature of this invention the carrier device aforesaid comprises a disc-like base having an upstanding pin to engage and locate the records by the central holes ordinarily provided in them.

Preferably the containers are open-topped and so formed that each can constitute a closure or lid for the one below it, and generally there will be provided a separate lid as a closure for the top container of a stack.

In a particular embodiment of this invention which will now be described by way of example, the container, which may be made of any suitable or desired material, is in the form of a circular or polygonal flat box of a size suitable to receive the standard ten-inch or twelve-inch diameter records. The carrier device which is used with the container is a separate element comprising a flat disc-like base having an upstanding peg or pin which is of such diameter as easily to engage the central holes of gramophone records. The base is made sufficiently large to provide adequate support for a group of records threaded on to the peg, and the peg is of such a length that when a group of eight or twelve, or any other desired number of records are assembled on it, there is a sufficient length projecting above these records to enable it to be lifted with the records on it.

In the simplest form the peg is rigid and of sufficient length to provide means for gripping its upper end, but obviously the upper end may be hinged so that it can swing to one side after the records have been assembled on it to reduce the overall height.

In order to permit the records to lie flat upon one another in the container so that they are adequately supported when stored, and thereby not liable to become warped a recess may be provided in the base of the container to accommodate the disc portion of the carrier; alternatively an equivalent effect can be obtained by providing on the bottom of the container an annular layer of felt which will receive the bottom record of a stack and at the same time provide accommodation for the disc-like base aforesaid so that the records are entirely supported on a flat surface.

Preferably each container is made with a downwardly projecting lip round its periphery so that it fits over the upper open side of another container and constitutes a closure therefor: in this way a number of containers may be conveniently mounted in a vertical stack and a lid is provided for the top one so that a complete enclosure for the records is obtained.

When it is desired to play any group of records, all that is necessary is to lift off all the containers above the desired container so as to expose its contents, then to lift the stack of records in that container on their carrier. Still holding

[*Price* 1/-]

them as a group, the carrier is removed and the group is threaded on to the locating pin ordinarily provided on the gramophone and they are then ready for reproduction. When their reproduction is finished, the group which have been reassembled on the gramophone are lifted, as a group, and placed on the carrier device and replaced in the container.

It will be appreciated that in this way the individual handling of the various records is completely avoided, the risk of scratching them is entirely eliminated and even the access of dust to them is considerably restricted since the group of records are always kept and handled as a group and not separately exposed.

Finally it will be appreciated that the containers may be made in any desired ornamental form to constitute a pleasing article of furniture, and any desired arrangement may be made for marking on each container the names or identity of the records contained in it.

Dated this 3rd day of October, 1936.

BOULT, WADE & TENNANT,
Chartered Patent Agents,
111 & 112, Hatton Garden,
London, E.C.1.

COMPLETE SPECIFICATION

## Improvements in Cases for Storage of Gramophone Records

I, Carl Alfred Bendix, a British Subject, of 53, Park Lane, London, W.1, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention is for improvements relating to the storage of gramophone records and has for its object to provide an improved construction and arrangement of casing which stores the records lying flat on one another so that there is no liability of warping or distortion, and moreover is particularly adapted to accommodate groups of records which are normally used together.

It is customary now to construct gramophones so that they receive a number of records, usually eight, but sometimes twelve, in a group, and automatically to effect the changing of the records as the reproduction of each is finished. Hitherto it has been necessary to assemble the various records of a group individually and place each one separately in position in the gramophone mechanism, but since a certain selection of records are normally always used as a group, and never individually, another object of this invention is to facilitate the storage and handling of the records in such groups; the invention is, however, equally advantageous for storing records when they are to be used individually.

It has heretofore been proposed to provide a holder for records comprising a flat supporting surface, a projecting stem upon which the records were fitted, a cover-plate adapted to bear on the outermost record and a nut screwed on the stem to clamp the assemblage together. This holder was either provided with a waterproof cover, or constructed as a container with the stem fixed on the base thereof.

The present invention differs in that, as mentioned above, it is primarily directed to facilitate the handling of the records in groups, and therefore the invention consists in the combination with a cabinet, of a removable carrier-device within it which is adapted to receive and locate a number of records lying flat on one another in a stack; this facilitates their removal from the container and their subsequent handling as a unitary stack, if they are so to be used, but also makes it easy to find any individual record.

The carrier-device aforesaid comprises a disc-like base having an upstanding pin to engage and locate the records by the central holes ordinarily provided in them.

Preferably the containers are open-topped and so formed that each can constitute a closure or lid for the one below it, and generally there will be provided a separate lid as a closure for the top container of a stack.

In the accompanying drawings:

Figure 1 is a perspective view showing a stack of four containers with a separate lid,

Figure 2 is a sectional view of two containers showing the mode of construction, and

Figure 3 is a sectional view showing an alternative mode of construction.

Like reference characters indicate like parts in these drawings.

Each container 10, of which there are four shown in Figure 1, is made of any suitable or desired material and, as illustrated, is in the form of an octagonal box of a size suitable to receive in it a standard ten-inch or twelve-inch diameter gramophone record. Each container is

preferably made, as shown in Figure 2, with a downwardly projecting lip 11 on its side walls 12 so that it can fit over the side walls 12 of another container situated below it, and constitute a closure therefor. The bottom 13 of each container is recessed at the centre, and in the example illustrated this recessing is obtained by providing on the bottom of the container an annular layer of felt or like material which will provide a flat surface upon which the records 15 can lie.

The carrier-device for the records is an element separate from the container and comprising a flat disc-like base 16 with an upstanding peg or pin 17 which is of such diameter as easily to engage the central hole which is provided on a gramophone record. The base 16 is made sufficiently large to provide adequate support for a group of records threaded on to the peg 17, and the peg itself is of such length that when a group of say eight or twelve, or any other desired number of records are assembled on it, there is sufficient length projecting above these records to enable the carrier to be lifted with the records on it. The upper end of the peg 17 may be knurled as shown at 18 to provide a secure grip on it.

In its simplest form the peg 17 is rigid and of sufficient length to provide the grip 18, but obviously the upper end of the peg may be hinged so that it can be swung down after the records have been assembled on it if it is desired to reduce the overall height of the peg and of the container.

It will be seen that the disc portion 16 of the carrier-device lies in the recess provided by the felt base 14 so that the records lie perfectly flat upon one another and upon the bottom of the container so that during the whole time they are stored they are adequately supported and cannot become warped. This advantage is of particular importance in hot or damp climates.

It will be seen that each container 10 constitutes a closure for a container beneath it, and when a stack of them is assembled, as shown in Figure 1, a separate lid 19 is provided to perform a closure for the top container so that a complete enclosure for the records is obtained. It is usually desirable to have an index of the records which are stored in the containers and this is conveniently provided on the inside of the lid.

When it is desired to play any group of records, all that is necessary is to lift off all the containers above the desired container so as to expose its contents, then to lift the stack of records in that container on their carrier. Still holding them as a group, the carrier is removed and the group is threaded on to the locating pin ordinarily provided on the gramophone and they are then ready for reproduction. When their reproduction is finished, the group which have been reassembled on the gramophone are lifted, as a group, and placed on the carrier-device and replaced in the container.

It will be appreciated that in this way the individual handling of the various records is completely avoided, the risk of scratching them is entirely eliminated and even the access of dust to them is considerably restricted since the group of records are always kept and handled as a group and not separately exposed.

In the modification illustrated in Figure 3, each container 10 is provided with an upstanding lip 20 around the upper edge of its side walls instead of around the lower edge of its walls, as shown in Figure 2, so that a second container fits into the top of the first container. The lid, it will be appreciated, is then arranged to fit into the top-most container of the stack instead of fitting over it, as shown in Figures 1 and 2. Whilst the drawings show an octagonal construction of container, as being the preferred shape, it will be appreciated that they can be cylindrical or any other polygonal shape as this is entirely a matter of taste and they also may be made in any desired ornamental form to constitute a pleasing article of furniture. They may be made of wood or any other suitable material or of compositions such for example as are sold under the Registered Trade Mark "Bakelite" and may be painted, coloured or decorated as desired.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In gramophone-record storage-means, the combination with a cabinet, of a removable carrier-device within it which is adapted to receive and locate a number of records lying flat on one another in a stack, whereby to facilitate their removal from the container and their subsequent handling as a unitary stack, if so desired.

2. In gramophone-record storage-means according to claim 1, a carrier-device comprising a disc-like base having an upstanding pin to engage and locate the records by the central holes ordinarily provided in them.

3. Gramophone-record storage-means according to claim 1 or claim 2 comprising a plurality of containers each with a

carrier-device in it, adapted to nest one on top of another substantially as described.

4. The improved storage-means for gramophone records as described and illustrated in the accompanying drawings.

Dated this 10th day of May, 1937.

BOULT, WADE & TENNANT,
Chartered Patent Agents,
111 & 112, Hatton Garden,
London, E.C.1.

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